

# OPRB - Database Open/Close Processing

This Natural profile parameter only applies to Adabas and VSAM databases.

It controls the use of database Open/Close commands during a Natural session.

The NTOPRB macro can be used as an alternative to the profile parameter OPRB in the NTPRM macro. The maximum length of an OPRB parameter specification is 256 bytes. If you require a longer specification, use the NTOPRB macro instead of the OPRB parameter.

If you wish to make OPRB specifications that are to apply to all databases, it is strongly recommended that you use the OPRB parameter in the NTPRM macro (and not an NTOPRB macro).

<b>Possible settings</b>	OPRB=( <i>string</i> )	With this syntax, you specify an Open request for <i>all</i> databases.
	OPRB=(DBID= <i>nn1</i> , <i>string</i> ,DBID= <i>nn2</i> , <i>string</i> , ...)	With this syntax, you specify an Open request for specific individual databases. As defined in the macro NTDB, the specified DBID identifies the type of database.
	OPRB=( <i>string</i> ,DBID= <i>nn1</i> , <i>string</i> ,DBID= <i>nn2</i> , <i>string</i> , ...)	With this syntax, you specify an Open request for specific individual databases and also a default Open request - the initial <i>string</i> - which applies to all databases for which you do not specify an individual <i>string</i> .
<b>Default setting</b>	None	
<b>Dynamic specification</b>	NO	
<b>Specification within session</b>	NO	

Generally, the OPRB parameter uses one of the above syntaxes (the possible contents of the *strings* depend on the database system).

Instead of using the OPRB parameter, you can also use the macro NTOPRB in the Natural parameter module NATPARM.

The following topics are covered below:

- Dynamic OPRB with Natural Security
- OPRB for VSAM
- OPRB for Adabas
- NTOPRB Macro Syntax
- Examples of NTOPRB Macros

## Dynamic OPRB with Natural Security

A dynamically specified OPRB parameter applies for all logons to libraries in whose security profiles no OPRB parameter is specified. For a logon to a library in whose security profile the OPRB parameter is specified, any dynamically specified OPRB parameter is ignored and the one from the security profile applies.

## OPRB for VSAM

The *strings* which can be specified for VSAM databases are described under the OPRB Parameter for VSAM Databases in the Natural for VSAM documentation.

## OPRB for Adabas

For Adabas databases, the OPRB parameter is required if either of the following conditions is true for the Natural session:

- An explicit list of Adabas files to be accessed/updated is to be provided. This is necessary, for example, if Adabas cluster updating or exclusive file control is to be requested.
- A single logical transaction is to span two or more Natural programs and, therefore, it is not desired to have Natural issue an END TRANSACTION and CLOSE command at the termination of any given Natural program.

If the OPRB parameter is omitted in the NATPARM module or OPRB=OFF is specified as a dynamic parameter, a Natural session commences with an Adabas Open command requesting UPD (access/update) to the Natural system file. Natural also issues RELEASE CID (Adabas RC) commands to release all ISN lists (ISN lists specified in a RETAIN clause of a Natural FIND statement are not released).

The Adabas record buffer to be used with the initial Adabas OP command can be explicitly provided. The format is similar to that used in an Adabas record buffer for the OP command with the exception that no blanks can be embedded, and the complete setting must be enclosed in parentheses (not apostrophes).

### Example 1:

```
OPRB= ( ACC=2 , 4 , 6 , UPD=8 . )
```

This specifies that Adabas Files 2,4 and 6 are to be made available for access only and that Adabas File 8 is to be made available for update (which also implies access).

### Example 2:

```
OPRB= ( EXU=1 , 2 , 3 . )
```

This specifies that Adabas Files 1,2 and 3 are to be placed under exclusive control for this Natural session.

Combinations of the keywords ACC, UPD and EXU must follow the rules as defined in the relevant Adabas documentation. When these keywords are coded, Natural issues an OP command at the start of a Natural session and a CL at the end of the Natural session. At the end of a Natural program, only the required RC commands are issued to release held ISN lists.

In all of the above situations, the OP command, which is always issued at the start of a Natural session, contains in the Additions 1 field of the Adabas control block the User ID for the Natural session. In batch mode, this is the job name. In TP mode, this is the setting supplied at system initialization by the Natural interface module. In both cases, the setting used is available in the Natural system variable \*INIT-USER.

## NTOPRB Macro Syntax

The syntax of the NTOPRB macro is as follows:

```
NTOPRB  dbid, 'ACC=fnr,UPD=fnr'
```

For possible values, see the OPRB parameter; if you use Natural with VSAM, see also the Natural for VSAM documentation.

## Examples of NTOPRB Macros

```
NTOPRB 12, 'ACC=40,UPD=20'
```

```
NTOPRB 15, 'EXU=1, ','2,3'
```

If the OPRB string for one DBID is very long, it can be divided in two or more strings separated by commas (see the second example), as the Assembler allows single strings up to 256 bytes only.